AMENDMENTS

In the Specification:

Please substitute Table 8, as provided below, for original Table 8:

Table 8

Receptor	Peptide ligand	SEQ ID NO	Species of origin	EC_{50} range-$GTP\gamma S$ assay	IC_{50} range-binding assay
CEGPCR4 (SEQ ID NO:22)	DVPGVLRF-NH_2	80	*C. elegans/flp18*	~5-80 nM	0.5-10 nM
	KSVPGVLRF-NH_2	92	*C. elegans/flp18*		
	SEVPGVLRF-NH_2	98	*C. elegans/flp18*		
	SVPGVLRF-NH_2	100	*C. elegans/flp18*		
	DFDGAMPGVLRF-NH_2	120	*C. elegans/flp18*		
	EIPGVLRF-NH_2	121	*C. elegans/flp18*		
	AVPGVLRF-NH_2 (AF3)	79	*A. suum*		
	GDVPGVLRF-NH_2 (AF4)	84	*A. suum*		
	GMPGVLRF-NH_2 (AF20)	87	*A. suum*		
	ASPSFIRF-NH_2	78	*C. elegans/flp4*		
CEGPCR4 (SEQ ID NO:22)	GNSFLRF-NH_2	88	*Manduca*	~0.4 - 9 _M	60-900 µM
	KPNFLRF-NH_2	91	*C. elegans/flp1*		
	PDVDHVFLRF-NH_2	94	*Locust*		
	(SchistoFLRFa)	95	*Locust*		
	pQDVDHVFLRF-NH_2 (leucomyosuppressin)#	90	synthetic		
	ILNIeRF-NH_2				
CEGPCR4 (SEQ ID NO:22)	SPLGTMRF-NH_2	143	*C. elegans/flp3*	~10 _M or higher	50-500 µM
	SDNFMRF-NH_2	122	Drosophila		
	PDNFMRF-NH_2	123	Drosophila		
	SAEPFGTMRF-NH_2	97	*C. elegans/flp3*		
	GGPQGPLRF-NH_2	85	*C. elegans/flp15*		
	EIVFHQISPIFFRF-NH_2	83	*C. elegans/flp14*		
	TDVDHVFLRF-NH_2	101	*Drosophila*		
	TNRNFLRF-NH_2 (Lobster peptide II)	102	*Lobster*		
	NGAPQPFVRF-NH_2	93	*C. elegans/flp11*		

CEGPCR4 (SEQ ID NO:22)	VLRF-NH_2	152	synthetic	~4 μM	~0.4 μM

Please substitute the passage provided below for the text at page 53, line 7 to page 54, line 3:

"The CEGPCR3 receptor (SEQ ID NO:43) was found to be activated by several peptide ligands (Table 7), as determined in the GTP_S assay. Chinese hamster ovary cells were incubated for 24 hours at 37°C after transfection, followed by an additional 24 hours incubation at 28°C before cell harvesting for membrane preparation. CEGPCR3 was matched with two *C. elegans* peptides encoded by *flp15*, GGPQGPLRF-NH_2 (SEQ ID NO:85; EC_{50} 152 nM) and GPSGPLRF-NH_2 (SEQ ID NO:89; EC_{50} 422 nM). A *Manduca* peptide, GNSFLRF-NH_2 (SEQ ID NO:88; EC_{50} 7900 nM), also activated the CEGPCR3 receptor, albeit with a potency about 19-52-fold lower than that determined for the two *C. elegans flp15* peptides. Based on these data, we identified CEGPCR3 as the receptor for *flp15* peptides.

Table 7

Receptor	**Peptide ligand**	**SEQ ID NO**	**Species of origin**	**EC_{50} range**
CEGPCR3 (SEQ ID NO:44)	GGPQGPLRF-NH_2 GPSGPLRF-NH_2	85 89	*C. elegans/flp15* *C. elegans/flp15*	150 –400 nM
	GNSFLRF-NH_2	88	*Manduca*	~ 8 _M
CEGPCR7 (SEQ ID NO:26)	GLGPRPLRF-NH_2 [I]Y^0-GLGPRPLRF-NH_2	86 118	*A. suum (AF9)/ C.elegans (flp21)* Synthetic AF9 analog	~200-250 nM

In addition, peptide ligands were identified for the CEGPCR7 receptor (SEQ ID NO:25), as revealed in Table 7. One peptide bears the sequence GLGPRPLRF-NH_2 (SEQ ID NO:86; AF9) (EC_{50} 207 nM). It is worth noting that [I]Y^0GLGPRPLRF-NH_2 (SEQ ID NO:118), representing an AF9 analog N-terminally extended with a 3-iodo-Tyr residue, was also active (EC_{50} 237 nM). The

functional activity of [I]Y^0AF9 indicates that this analog is an agonist and, in labeled (*e.g.*, radioiodinated) form is useful as a probe for binding assays, including high-throughput screening (HTS) assays."